

Solar Innovation

Research, environmental education

2024





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EDITORIAL



At a time when questions of energy production and consumption are at the heart of global political concerns, the development of solar energy is now an essential solution.

The Department of Pyrénées-Orientales, which enjoys a particularly generous amount of sunshine, was the first place in the world to install a thermodynamic solar power tower. This project, called Thémis, was unique in the 1980s and was to be the subject of experiments for several years before becoming a field study centre for astrophysics researchers interested in cosmic gamma rays, up until 2004.

For 20 years, the Department, which owns the site, has invested in it, with the support of the Region, to strengthen the international reach of this tool in the service of research and development in new solar technologies.

In addition, Thémis Solaire Innovation (TSI), like all the sites managed by the Department, is open to the general public to meet the objective of environmental education and to develop a science tourism offer.

I hope you enjoy discovering all about the power and applications of solar energy.

Hermeline MALHERBE President of the Department of Pyrénées-Orientales



TSI, A RESEARCH **AND TOURISM PLATFORM SINCE 2004**

RETURNING **TO ITS ROOTS TO PROMOTE** SOLAR ENERGY

After the astronomical observations, the **Department** of Pyrénées-Orientales decided to launch a **study** to give Thémis back its original vocation: to develop new technologies for the production and exploitation of energy from solar origins.

Thereafter, the Department, the owner of the site, confirmed its willingness to redevelop the site in favour of technological innovation, while developing a new tourism offer in Cerdagne. Thémis then became Thémis Solaire Innovation, a research and innovation platform.





AN EXCEPTIONAL SITE FOR ENERGY TRANSITION

SINCE 2014

Thémis Solaire Innovation operates and develops numerous activities in line with the following 3 aims :

- To contribute to **R&D** and **technological innovation** in the area of new solar technologies,
- To develop a training, seminars and events offer focussed on energy and the energy transition.
- To promote science tourism and environmental education for all audiences.



EDF Renouvelables Photovoltaic solar power station on trackers



Concentrated photovoltaic

solar power station



Engie Green Bifacial photovoltaic solar power station

FROM 2012 TO 2014

The **Department** of Pyrénées-Orientales, in partnership with the **Region**, undertook major works including the renovation of the existing buildings.



Conference in the auditorium

The site hosts innovative projects on the various different parts of the site, as well as hosting organisations and laboratories in offices and has available for any business a large co-working space in the Innovation Centre. The site headquarters offers the possibility of presenting to the general public a range of events and tools for learning in order to improve their knowledge of solar energy and therefore to promote energy transition.

FROM WELCOMING INNOVATIVE SOLAR PROJECTS **TO RENEWING THE WHOLE OF THE DEPARTMENT'S SITE**

FROM 2008

Several agreements were set in place with organisations with potential projects, with the aim of checking the feasibility of **new solar** technologies.

The CNRS PROMES laboratory led various projects on the tower and on heliostats. The other companies worked on installations built on neighbouring plots.



CNRS PROMES Thermodynamic solar power tower



THE 3 LIVES OF THÉMIS



UNDERSTANDING ENERGY



THE HISTORY OF SOLAR ENERGY IN THE P.-O.



SUN, MYTHS AND REALITY





OUTSIDE Free - Open access

CHEMIN DU BELVÉDÈRE

- · 1 km walk (there and back)
- · View of the installations
- Viewpoint indicator





EVENT

Charge - Booking required - Only in summer

Departs:

Price: 6€, 4€ reduced price,

2 pm, 3 pm and 4 pm

children under 7 free

(duration: 1 hour)

GUIDED VISIT
• History of the site
• Current projects
• Interactive



2 independent WORKSHOPS

Free* - Booking required Opening times: 10.30 am, 2 pm and 4 pm (duration: 1 hour) GAMES TO BORROW 'FAB LAB' SOLAR CONSTRUCTIONS



*except for the cost of the 'FabLab' solar kit €6

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OPENING DATES 2024

During its open days, , TSI offers **activities** aimed at raising the awareness of the general public in **energy transition** and understanding **solar energy**.

OPEN TO THE PUBLIC

OPEN TO GROUPS (reservation only)

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LUN	MAR	MER	JEU	VEN	SAM	DIM	LUN	MAR	MER	JEU	VEN	SAM	DIM	LUN	MAR	MER	JEU	VEN	SAM	DIM	LUN	MAR	MER	JEU	VEN	SAM	DIM		
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Guided visits from 8 July to 31 August 2024 and on European Heritage Days on 21 and 22 September 2024.

OPENING TIMES

INSIDE

From 10 am to 12 noon and from 1.30 pm to 5.30 pm

OUTSIDE

From 10 am to 5.30 pm

Solaire Innovation

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